

REMARKS

Claims 1, 2, 5-9 and 11-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Pollitt et al, PCT Publication No. WO 98/21159, in view of evidence submitted by the Applicant, and as being unpatentable over Pollitt, GB 2,322,630, in view of evidence submitted by the applicant.

The Examiner's rejections are respectfully traversed.

The Applicant's invention is directed to a settable mixture including silica sand. The Applicant has determined that there are maximum amounts of both aluminum oxide and ferrous oxide that may be contained in the silica sand or the mixture will not function as desired. Pollitt '159 and '630 do not disclose maximum levels of either the aluminum oxide or the ferrous oxide. The Pollitt references disclose using sand however; there is no teaching or suggestion that there are maximum levels of aluminum oxide and ferrous oxide. The Examiner has indicated that the Applicant's statement that the instant silica sand shortens setting time and improves overall strength of the product has no probative value as a simple statement alone. Thus, enclosed herewith is an affidavit by John Andrews the Technical Director of Karin Holdings (UK) Limited. Mr. Andrews commissioned CERAM Research Limited to carry out tests on a number of settable mixtures of silica sand and liquid polybutadiene where the sands were known to have various contents of aluminum oxide and ferrous oxide. The tests were carried out to determine the effects of two chemical constituents in various proportions on the setting time of the mixture and its tendency to stain in the surrounding substrate. Specifically, particular tests were carried out to determine the effects of sand having an aluminum oxide content in excess of 2% by weight of the sand and/or ferrous oxide content in excess of 1% by weight of the sand had on the mixture.

The test method and results are given in the annexed Exhibit JA1. As can be seen from Table 1, the sand which has compound contents within the ranges defined in claim 1, has the shortest setting time.

The sand composites were also tested for staining effect on concrete paving units. Exhibit JA2 illustrates the paving units prior to being tested and Exhibit JA3 shows the paving units after being tested with the five different sands and a control. No staining occurred by the sample which fell within the claim limits of the Applicant's application. This sample, specifically *Redhill T*, is also the sample with the shortest setting time, specifically two and a half hours. From the enclosed tests it is evidenced that the setting times increase as the percentage of compounds increases and that those sands with the highest levels of aluminum oxide and ferrous oxide also have the most staining. Thus, the applicant's claims which include maximum levels of both the aluminum oxide and the ferrous oxide, are not anticipated by either of the Pollitt references.

As the cited prior art references do not disclose or even suggest the need for specific ranges of both the aluminum oxide and the ferrous oxide, the Applicant does not believe their invention is anticipated by Pollitt, WO 98/21159 or GB 2,322,630. Thus, claims 1, 2, 5-9 and 11-13 are considered to be patently distinguishable over the prior art of record.

The application is now considered to be in condition for allowance, and an early indication of same is earnestly solicited.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Arlene J. Powers", is written over a horizontal line.

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